

Lower Duwamish Waterway Superfund Site

March 2005

Comments Requested on Lower Duwamish Waterway/Terminal 117 Sediment Cleanup Plan

The U.S. Environmental Protection Agency (EPA) invites you to comment on a plan for cleaning up contaminated sediment (mud) and the riverbank at Terminal 117 on the Lower Duwamish Waterway in Seattle. This fact sheet provides information on cleanup alternatives and presents EPA's proposed alternative.

What Will Be Cleaned Up?

The cleanup is for the Terminal 117 area, on the west side of the Lower Duwamish Waterway, between South Park Marina and Boeing South Park. The terminal was formerly owned by the Malarkey Asphalt Company. All of the property to be cleaned up is now owned or controlled by the Port of Seattle.

With oversight by EPA, the Port previously removed contaminated soil from a part of the property next to the waterway.

The sediment cleanup will extend into the South Park Marina, where some people live aboard boats, and others moor or store their boats.



The Terminal 117 cleanup will be coordinated with South Park Marina. (Photo: Windward Environmental)

The areas to be cleaned up at the terminal include the bank, the mudflat, and the submerged zone.

(See photo on page 2.)

**Send your written comments on
the Terminal 117 cleanup plan by
*April 7, 2005***

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U.S. Environmental Protection Agency
1200 Sixth Avenue, ECL-111
Seattle, WA 98101-1128

The plan, described in detail in the "Engineering Evaluation/Cost Analysis," is part of the administrative record for the cleanup available for review at the EPA Region 10 Records Center. You can also review the plan at other places, including the EPA Region 10 website.

See "For More Information" on page 3.

Why Clean Up Terminal 117 Now?

EPA, the Port of Seattle and the City of Seattle have studied Terminal 117 as part of a larger investigation of about five miles of the Lower Duwamish Waterway. Concentrations of chemicals at the property, especially polychlorinated biphenyls (PCBs), exceed State of Washington standards. PCBs are manmade chemicals that are toxic to organisms that live in the mud, build up in fish, and can harm the health of people who eat contaminated fish or shellfish.

(Continued on page 2)

Why Clean Up Terminal 117 Now? *continued*

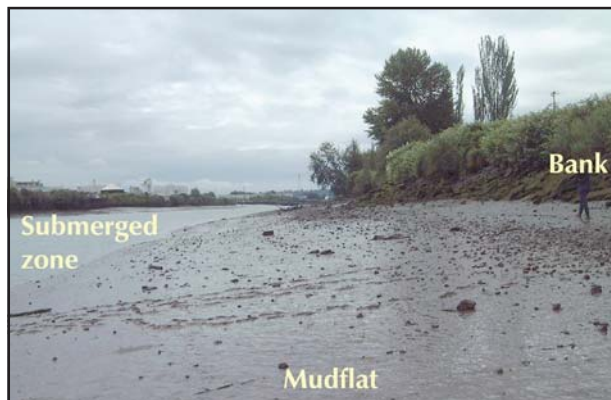
The Terminal 117 cleanup will remove sediment in the Lower Duwamish Waterway that contains high concentrations of PCBs and other contaminants. Fish, as well as organisms that live in the mud, will have less exposure to contaminants.

What Are the Cleanup Alternatives?

Under an agreement with EPA and the Washington State Department of Ecology (Ecology), the Port of Seattle and the City of Seattle developed cleanup plans for Terminal 117. EPA has evaluated these plans. Both alternatives combine excavation, dredging, capping, and disposal of contaminated sediment and riverbank material.

The exact methods for this work will be determined during the design of the cleanup. Removal and capping of sediment from the mudflat and the bank are expected to be done with excavator buckets, front-end loaders, and dump trucks. Removal and capping of sediment from the submerged zone would be done with a dredge bucket. Cap materials would include heavy fabric, stones, gravel and sand.

A barge would take dredged sediment to an appropriate handling facility. Trucks or rail cars would transport removed sediment to an appropriate landfill for disposal.



The Terminal 117 cleanup will include the bank, the mudflat, and the submerged zone. (Photo: Windward Environmental)

Both alternatives would protect human health and the environment, reduce PCB concentrations to meet state standards, and reduce the potential for continued contamination of the waterway from Terminal 117. In addition, both would be designed to remain effective in the future.

Differences in the alternatives include the amount of PCBs and sediment removed, the amount of PCBs and sediment capped, and the cost. In Alternative 1, more sediment would be removed from the submerged zone than in Alternative 2. In alternative 2, the submerged sediment would be capped in place, except at the South Park Marina, where sediment is removed to maintain navigation depths.

Comparison of Alternative 1 and Alternative 2

	PCBs to be removed (approximate amount in pounds)	Material to be removed (in cubic yards)	Material to be placed for cap (in cubic yards)	Cost
Alternative 1	430	13,000	6,500	\$3,350,000
Alternative 2	400	9,000	10,000	\$3,100,000

EPA Prefers Alternative 1

EPA favors Alternative 1, which has been proposed by the Port of Seattle and the City of Seattle. Because more PCBs would be removed, Alternative 1 should reduce the long-term risk from these contaminants more than Alternative 2. Let us know what you think about Alternative 1 or Alternative 2 by writing to us during the public comment period announced on the first page of this fact sheet.

What Happens Next?

EPA will consider comments received on the alternatives and respond to them in a document called a responsiveness summary. EPA plans to complete this summary and make the cleanup decision in the spring of 2005. After the design and other preparations, the actual cleanup should begin in about the summer of 2006. The Port of Seattle and the City of Seattle will fund the work.

Contaminated sediment outside the Terminal 117 cleanup boundary are being studied as part of the ongoing investigation of the entire Lower Duwamish Waterway. EPA and Ecology will determine whether sediment outside the Terminal 117 cleanup boundary needs to be cleaned up when they develop a proposed cleanup plan for the rest of the waterway.

Background on the Lower Duwamish Waterway Site

The Lower Duwamish Waterway has served as Seattle's major industrial corridor since it was created by the widening and straightening of the Lower Duwamish River, completed in the early 1900s. Past and present discharges to the waterway include boat manufacturing and repair, marina operations, airplane parts manufacturing, and metals fabrication. In addition, twelve combined sewer overflows and over one hundred storm drains discharge to the waterway.

EPA added the Lower Duwamish Waterway site to the Superfund list on September 13, 2001. This is EPA's list of the nation's most contaminated

hazardous waste sites that are targeted for investigation and cleanup.

In December 2000, EPA and Ecology signed an agreement with the Port of Seattle, the City of Seattle, King County, and The Boeing Company. Under the agreement, this group is investigating the waterway contamination, assessing potential risks to human health and the environment, and evaluating cleanup alternatives.

Agreements for the actual cleanup of the sediments and the control of contaminant sources may involve other parties.

For More Information

You may review copies of the Terminal 117 cleanup proposal and other site documents at the locations listed below. Please call for an appointment:

Georgetown Gospel Chapel, 6606 Carleton Avenue South, Seattle, WA, 206-767-3207

EPA Region 10 Records Center, 1200 Sixth Avenue, Seattle, WA, 206-553-4494

Washington State Department of Ecology, 3190 160th Avenue SE, Bellevue, WA, 425-649-7190

You can also review the proposal on the EPA website:
<http://yosemite.epa.gov/r10/cleanup.nsf/sites/lduwamish>.

(See contact information on back page.)



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*LOWER DUWAMISH WATERWAY
TERMINAL 117 FACT SHEET
YOUR COMMENTS ARE INVITED
MARCH 2005*

Questions?

If you have questions about the Terminal 117 cleanup, please contact one of the following persons:

General Information

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Involvement Coordinator
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Technical Information

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Source Control

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Community Advisory Group

BJ Cummings, Duwamish River Cleanup Coalition
(206) 954-0218 or info@duwamishcleanup.org

Si desea hablar con alguien que habla español, llame
a **Pamela Emerson**, EPA, 206-553-1287.



*Alternative formats are available. For reasonable
accommodation, please call Cindy Schuster.
TTY users, please call the Federal Relay Service at
1-800-877-8339 and give the operator Cindy Schuster's
phone number.*